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**PATENT** 

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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Title:

**CONFIGURING** 

**PROCESSING** 

**RELATIONSHIPS AMONG** 

ENTITIES OF AN ORGANIZATION

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## WHAT IS CLAIMED IS:

## 1. A method comprising:

displaying one or more processing relationship object representations on a display screen in data communication with a Financial Service Organization (FSO) computer system comprising a database;

selecting one or more processing relationship object representations from the displayed processing relationship object representations;

preparing a processing relationship definition for each of the selected one or more processing relationship object representations; and storing each processing relationship definition in the database.

- 2. The method of claim 1, wherein each processing relationship definition stored in the database is configured for use in preparing a processing relationship value from an FSO transaction-related data in the FSO computer system.
- 3. The method of claim 2, wherein the processing relationship value is configured for use in identifying an FSO business entity as an owner of the FSO transaction-related data.
- 4. The method of claim 3, wherein the FSO business entity is a company or a business unit or a bank branch office or a regional bank or a credit card line or an issuer or an acquirer.
- 5. The method of claim 1, wherein the selecting one or more processing relationship object representations is performed by a user of the FSO computer system.
- 6. The method of claim 1, wherein the selecting one or more processing relationship object representations is programmable or executable by an expert system.

- 7. The method of claim 1, wherein the storing the processing relationship definition in the database comprises transferring the processing relationship definition to a report record definition stored in the database.
- 8. The method of claim 1, wherein the preparing the processing relationship definition comprises creating a highest level processing relationship object in a processing relationship structure, wherein the highest level processing relationship object represents an FSO.
- 9. The method of claim 8, wherein the processing relationship structure is expanded by inserting one or more processing relationship objects as descendants of the highest level processing relationship object.
- 10. The method of claim 8, wherein the processing relationship structure is edited by inserting or deleting one or more processing relationship objects, wherein each of the one or more processing relationship objects are descendents of the highest level processing relationship object.
- 11. The method of claim 1, wherein the displaying one or more processing relationship object representations on a display screen comprises displaying values associated with a sequence number and a level number.
- 12. The method of claim 11, wherein the level number identifies a level in a hierarchical tree.
- 13. The method of claim 1, wherein the displaying one or more processing relationship object representations on a display screen comprises displaying values associated with an object name, an object description and an object number for a displayed processing relationship object.

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- 14. The method of claim 13, wherein the object name identifies a unique name assigned to an object.
- 15. The method of claim 1, wherein the database is relational or object oriented.
- 16. The method of claim 1, wherein the selecting a first processing relationship object representation from one or more processing relationship object representations comprises positioning a cursor of an user input device above the first processing relationship object representation and clicking a button of the user input device.
- 17. The method of claim 1, wherein the preparing a processing relationship definition comprises creating or editing an object associated with each of the selected processing relationship object representation.
- 18. The method of claim 17, wherein the creating the object comprises identifying a unique object identifier and identifying values for the object properties.
- 19. The method of claim 1, wherein the preparing a processing relationship definition comprises identifying one or methods and one or more properties of an object associated with each of the selected processing relationship object representation.
- 20. The method of claim 1, wherein the processing relationship object representations comprises a class of objects representing a company or a business unit or a bank branch office or a regional bank or a credit card line or an issuer or an acquirer.
- 21. The method of claim 1, wherein the processing relationship object representations comprises an icon displayed on the display screen of the FSO computer system.
- 22. The method of claim 1, wherein a user of the FSO computer system executes a processing relationship configuration program to prepare the processing relationship definition.

- 23. The method of claim 1, wherein the user of FSO computer system executes a processing relationship configuration program to reconfigure and store in the database the processing relationship definition in response to changing business conditions.
- 24. A system for processing FSO transactions, the system comprising:
  - a computer program;
  - a computer system;

wherein the computer program is executable on the computer system to execute:

displaying one or more processing relationship object representations on a display screen in data communication with a Financial Service Organization (FSO) computer system comprising a database;

selecting one or more processing relationship object representations from the displayed processing relationship object representations;

preparing a processing relationship definition for each of the selected one or more processing relationship object representations; and

storing each processing relationship definition in the database.

- 25. The system of claim 24, wherein each processing relationship definition stored in the database is configured for use in preparing a processing relationship value from an FSO transaction-related data in the FSO computer system.
- 26. The system of claim 25, wherein the processing relationship value is configured for use in identifying an FSO business entity as an owner of the FSO transaction-related data.
- 27. The system of claim 26, wherein the FSO business entity is a company or a business unit or a bank branch office or a regional bank or a credit card line or an issuer or an acquirer.

- 28. The system of claim 24, wherein the selecting one or more processing relationship object representations is performed by a user of the FSO computer system.
- 29. The system of claim 24, wherein the selecting one or more processing relationship object representations is programmable or executable by an expert system.
- 30. The system of claim 24, wherein the storing the processing relationship definition in the database comprises transferring the processing relationship definition to a report record definition stored in the database.
- 31. The system of claim 24, wherein the preparing the processing relationship definition comprises creating a highest level processing relationship object in a processing relationship structure, wherein the highest level processing relationship object represents an FSO.
- 32. The system of claim 31, wherein the processing relationship structure is expanded by inserting one or more processing relationship objects as descendents of the highest level processing relationship object.
- 33. The system of claim 31, wherein the processing relationship structure is edited by inserting or deleting one or more processing relationship objects, wherein each of the one or more processing relationship objects are descendents of the highest level processing relationship object.
- 34. The system of claim 24, wherein the displaying one or more processing relationship object representations on a display screen comprises displaying values associated with a sequence number and a level number.
- 35. The system of claim 34, wherein the level number identifies a level in a hierarchical tree.

- 36. The system of claim 24, wherein the displaying one or more processing relationship object representations on a display screen comprises displaying values associated with an object name, an object description and an object number for a displayed processing relationship object.
- 37. The system of claim 36, wherein the object name identifies a unique name assigned to an object.
- 38. The system of claim 24, wherein the database is relational or object oriented.
- 39. The system of claim 24, wherein the selecting a first processing relationship object representation from one or more processing relationship object representations comprises positioning a cursor of an user input device above the first processing relationship object representation and clicking a button of the user input device.
- 40. The system of claim 24, wherein the preparing a processing relationship definition comprises creating or editing an object associated with each of the selected processing relationship object representation.
- 41. The system of claim 40, wherein the creating the object comprises identifying a unique object identifier and identifying values for the object properties.
- 42. The system of claim 24, wherein the preparing a processing relationship definition comprises identifying one or methods and one or more properties of an object associated with each of the selected processing relationship object representation.
- 43. The system of claim 24, wherein processing relationship object representations comprises a class of objects representing a company or a business unit or a bank branch office or a regional bank or a credit card line or an issuer or an acquirer.

- 44. The system of claim 24, wherein the processing relationship object representations comprises an icon displayed on the display screen of the FSO computer system.
- 45. The system of claim 24, wherein a user of the FSO computer system executes a processing relationship configuration program to prepare the processing relationship definition.
- 46. The system of claim 24, wherein the user of FSO computer system executes a processing relationship configuration program to reconfigure and store in the database the processing relationship definition in response to changing business conditions.
- 47. The system of claim 24, wherein the computer system comprises a display device coupled to the computer system to display data.
- 48. The system of claim 47, wherein the display device is a display screen.
- 49. The system of claim 24, wherein the computer system comprises a user input device coupled to the computer system to enter data.
- 50. The system of claim 49, wherein the user input device is a mouse or a keyboard.
- 51. A carrier medium comprising program instructions, wherein the program instructions are executable by a computer system to implement:

displaying one or more processing relationship object representations on a display screen in data communication with a Financial Service Organization (FSO) computer system comprising a database;

selecting one or more processing relationship object representations from the displayed processing relationship object representations;

preparing a processing relationship definition for each of the selected one or more processing relationship object representations; and storing each processing relationship definition in the database.

- 52. The carrier medium of claim 51, wherein each processing relationship definition stored in the database is configured for use in preparing a processing relationship value from an FSO transaction-related data in the FSO computer system.
- 53. The carrier medium of claim 52, wherein the processing relationship value is configured for use in identifying an FSO business entity as an owner of the FSO transaction-related data.
- 54. The carrier medium of claim 53, wherein the FSO business entity is a company or a business unit or a bank branch office or a regional bank or a credit card line or an issuer or an acquirer.
- 55. The carrier medium of claim 51, wherein the selecting one or more processing relationship object representations is performed by a user of the FSO computer system.
- 56. The carrier medium of claim 51, wherein the selecting one or more processing relationship object representations is programmable or executable by an expert system.
- 57. The carrier medium of claim 51, wherein the storing the processing relationship definition in the database comprises transferring the processing relationship definition to a report record definition stored in the database.
- 58. The carrier medium of claim 51, wherein the preparing the processing relationship definition comprises creating a highest level processing relationship object in a

processing relationship structure, wherein the highest level processing relationship object represents an FSO.

- 59. The carrier medium of claim 58, wherein the processing relationship structure is expanded by inserting one or more processing relationship objects as descendents of the highest level processing relationship object.
- 60. The carrier medium of claim 58, wherein the processing relationship structure is edited by inserting or deleting one or more processing relationship objects, wherein each of the one or more processing relationship objects are descendents of the highest level processing relationship object.
- 61. The carrier medium of claim 51, wherein the displaying one or more processing relationship object representations on a display screen comprises displaying values associated with a sequence number and a level number.
- 62. The carrier medium of claim 61, wherein the level number identifies a level in a hierarchical tree.
- 63. The carrier medium of claim 51, wherein the displaying one or more processing relationship object representations on a display screen comprises displaying values associated with an object name, an object description and an object number for a displayed processing relationship object.
- 64. The carrier medium of claim 63, wherein the object name identifies a unique name assigned to an object.
- 65. The carrier medium of claim 51, wherein the database is relational or object oriented.

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- 66. The carrier medium of claim 51, wherein the selecting a first processing relationship object representation from one or more processing relationship object representations comprises positioning a cursor of an user input device above the first processing relationship object representation and clicking a button of the user input device.
- 67. The carrier medium of claim 51, wherein the preparing a processing relationship definition comprises creating or editing an object associated with each of the selected processing relationship object representation.
- 68. The carrier medium of claim 67, wherein the creating the object comprises identifying a unique object identifier and identifying values for the object properties.
- 69. The carrier medium of claim 51, wherein the preparing a processing relationship definition comprises identifying one or methods and one or more properties of an object associated with each of the selected processing relationship object representation.
- 70. The carrier medium of claim 51, wherein processing relationship object representations comprises a class of objects representing a company or a business unit or a bank branch office or a regional bank or a credit card line or an issuer or an acquirer.
- 71. The carrier medium of claim 51, wherein the processing relationship object representations comprises an icon displayed on the display screen of the FSO computer system.
- 72. The carrier medium of claim 51, wherein a user of the FSO computer system executes a processing relationship configuration program to prepare the processing relationship definition.

- 73. The carrier medium of claim 51, wherein the user of FSO computer system executes a processing relationship configuration program to reconfigure and store in the database the processing relationship definition in response to changing business conditions.
- 74. A method performed in a Financial Service Organization (FSO) computer system, the method comprising:

defining a multilevel business organization structure for the FSO, wherein the multilevel business organization structure comprises one or more FSO business entities arranged in a hierarchical tree structure to represent a flow of information in the FSO:

defining one or more FSO objects to represent the one or more FSO business entities;

configuring a processing relationship structure comprising one or more processing relationship objects, wherein each of the one or more processing relationship objects is created from the one or more FSO objects and corresponds to an FSO business entity from the one or more FSO business entities; storing the processing relationship structure in a FSO database.

124. A method performed in a Financial Service Organization (FSO) computer system, the method comprising:

defining a multilevel business organization structure for an FSO, wherein the multilevel business organization structure comprises one or more FSO business entities arranged in a hierarchical tree structure to represent a flow of information in the FSO, wherein each of the one or more FSO business entities is represented by an FSO object;

configuring one or more methods and properties associated with each of one or more FSO objects;

storing each of the one or more FSO objects in an FSO database.